Physical Education Single Subject Matter Standards for the Single Subject Teaching Credential

California Commission on Teacher Credentialing
Approved May 2004

Preconditions for the Approval of
Subject Matter Programs in Physical Education

To be approved by the Commission, a Subject Matter Program in Physical Education must comply with the following preconditions.

(1) Each Program of Subject Matter Preparation for the Single Subject Credential in Physical Education shall consist of (a) at least 24 semester units (or 36 quarter units) of core coursework in physical education and related subjects commonly taught in California public schools and (b) 21 semester units (or 32 quarter units) of coursework that provides extended study of the subject. These two requirements are elaborated in Preconditions 2 and 3 below.

(2) The core of the program shall include coursework in (or directly related to) foundations in human movement as commonly taught in California public schools (Standards 11, 12, 13, 15, 16 and 17).

(3) Extended studies (breadth, depth, perspective, concentrations) in the program shall include coursework designed to provide experiences in and applications of movement concepts and forms as taught in California public schools (Standard 14). A concentration may, at the choice of the institution, be created with additional coursework in one of the nine areas of human movement. If a concentration is created, the coursework will be in addition to the units for applications of movement, concepts and form.

In addition to describing how a program meets each standard of program quality in this handbook, the program document by an institution shall include the course titles, unit designations, catalog descriptions and syllabi of all courses in the program that are used to meet the standards. Program documents must include a matrix chart that identifies which courses meet which standards.

Institutions may determine whether the standards and required elements are addressed through one or more courses for each commonly taught subject or courses offering integrated study of these subjects. Institutions may also define the program in terms of required or elective coursework. However, elective options must be equivalent in meeting the standards. Coursework offered by any appropriate department(s) of a regionally accredited institution may satisfy the preconditions and standards in this handbook. Programs may use general education courses in meeting the standards.

Standards Common to All

Standard 1: Program Philosophy and Purpose

The subject matter preparation program is based on an explicit statement of program philosophy that expresses its purpose, design, and desired outcomes in relation to the Standards of Quality and Effectiveness for Single Subject Teaching Credential Programs. The program provides the coursework and field experiences necessary to teach the specified subject to all of California's diverse public school population. Subject matter preparation in the program for prospective teachers is academically rigorous and intellectually stimulating. The program curriculum reflects and builds on the State-adopted *Academic Content Standards for K-12 Students* and *Curriculum Frameworks for California Public Schools.* The program is designed to establish a strong foundation in and understanding of subject matter knowledge for prospective teachers that provides a basis for continued development during each teacher's professional career. The sponsoring institution assigns high priority to and appropriately supports the program as an essential part of its mission.

Required Elements:

1.1 The program philosophy, design, and intended outcomes are consistent with the content of the State-adopted Academic Content Standards for K-12 students and Curriculum Frameworks for California public schools.

1.2 The statement of program philosophy shows a clear understanding of the preparation that prospective teachers need in order to be effective in delivering academic content to all students in California schools.

1.3 The program provides prospective teachers with the opportunity to learn and apply significant ideas, structures, methods and core concepts in the specified subject discipline(s) that underlies the 6-12 curriculum.

1.4 The program prepares prospective single-subject teachers to analyze complex discipline-based issues; synthesize information from multiple sources and perspectives; communicate skillfully in oral and written forms; and use appropriate technologies.

1.5 Program outcomes are defined clearly and assessments of prospective teachers and program reviews are appropriately aligned.

1.6 The institution conducts periodic review of the program philosophy, goals, design, and outcomes consistent with the following: campus program assessment

timelines, procedures, and policies; ongoing research and thinking in the discipline; nationally accepted content standards and recommendations; and the changing needs of public schools in California.

Standard 2: Diversity and Equity

The subject matter program provides equitable opportunities to learn for all prospective teachers by utilizing instructional, advisement and curricular practices that insure equal access to program academic content and knowledge of career options. Included in the program are the essential understandings, knowledge and appreciation of the perspectives and contributions by and about diverse groups in the discipline.

Required Elements:

2.1 In accordance with the Education Code Chapter 587, Statutes of 1999, (See Appendix A), human differences and similarities to be examined in the program include, but are not limited to those of sex, race, ethnicity, socio-economic status, religion, sexual orientation, and exceptionality. The program may also include study of other human similarities and differences.

2.2 The institution recruits and provides information and advice to men and women prospective teachers from diverse backgrounds on requirements for admission to and completion of subject matter programs.

2.3 The curriculum in the Subject Matter Program reflects the perspectives and contributions of diverse groups from a variety of cultures to the disciplines of study.

2.4 In the subject matter program, classroom practices and instructional materials are designed to provide equitable access to the academic content of the program to prospective teachers from all backgrounds.

2.5 The subject matter program incorporates a wide variety of pedagogical and instructional approaches to academic learning suitable to a diverse population of prospective teachers. Instructional practices and materials used in the program support equitable access for all prospective teachers and take into account current knowledge of cognition and human learning theory.

Standard 3: Technology

The study and application of current and emerging technologies, with a focus on those used in K-12 schools, for gathering, analyzing, managing, processing, and presenting information is an integral component of each prospective teacher's program study. Prospective teachers are introduced to legal, ethical, and social issues related to technology. The program prepares prospective teachers to meet the current technology requirements for admission to an approved California professional teacher preparation program.

Required Elements:

3.1 The institution provides prospective teachers in the subject matter program access to a wide array of current technology resources. The program faculty selects these technologies on the basis of their effective and appropriate uses in the disciplines of the subject matter program.

3.2 Prospective teachers demonstrate information processing competency, including but not limited to the use of appropriate technologies and tools for research, problem solving, data acquisition and analysis, communications, and presentation.

3.3 In the program, prospective teachers use current and emerging technologies relevant to the disciplines of study to enhance their subject matter knowledge and understanding.

Standard 4: Literacy

The program of subject matter preparation for prospective Single Subject teachers develops skills in literacy and academic discourse in the academic disciplines of study. Coursework and field experiences in the program include reflective and analytic instructional activities that specifically address the use of language, content and discourse to extend meaning and knowledge about ideas and experiences in the fields or discipline of the subject matter.

Required Elements:

4.1 The program develops prospective teachers' abilities to use academic language, content, and disciplinary thinking in purposeful ways to analyze, synthesize and evaluate experiences and enhance understanding in the discipline.

4.2 The program prepares prospective teachers to understand and use appropriately academic and technical terminology and the research conventions of the disciplines of the subject matter.

4.3 The program provides prospective teachers with opportunities to learn and demonstrate competence in reading, writing, listening, speaking, communicating and reasoning in their fields or discipline of the subject matter.

Standard 5: Varied Teaching Strategies

In the program, prospective Single Subject teachers participate in a variety of learning experiences that model effective curriculum practices, instructional strategies and assessments that prospective teachers will be expected to use in their own classrooms.

Required Elements:

5.1 Program faculty include in their instruction a variety of curriculum design, classroom organizational strategies, activities, materials and field experiences incorporating observing, recording, analyzing and interpreting content as appropriate to the discipline.

5.2 Program faculty employ a variety of interactive, engaging teaching styles that develop and reinforce skills and concepts through open-ended activities such as direct instruction, discourse, demonstrations, individual and cooperative learning explorations, peer instruction and student-centered discussion.

5.3 Faculty development programs provide tangible support for subject matter faculty to explore and use exemplary and innovative curriculum practices.

5.4 Program faculty use varied and innovative teaching strategies, which provide opportunities for prospective teachers to learn how content is conceived and organized for instruction in a way that fosters conceptual understanding as well as procedural knowledge.

5.5 Program coursework and fieldwork include the examination and use of various kinds of technology that are appropriate to the subject matter discipline.

Standard 6: Early Field Experiences

The program provides prospective Single Subject teachers with planned, structured field experiences in departmentalized classrooms beginning as early as possible in the subject matter program. These classroom experiences are linked to program coursework and give a breadth of experiences across grade levels and with diverse populations. The early field experience program is planned collaboratively by subject matter faculty, teacher education faculty and representatives from school districts. The institution cooperates with school districts in selecting schools and classrooms for introductory classroom experiences. The program includes a clear process for documenting each prospective teacher's observations and experiences.

Required Elements:

6.1 Introductory experiences shall include one or more of the following activities: planned observations, instruction or tutoring experiences, and other school based observations or activities that are appropriate for undergraduate students in a subject matter preparation program.

6.2 Prospective teachers' early field experiences are substantively linked to the content of coursework in the program.

6.3 Fieldwork experiences for all prospective teachers include significant interactions with K-12 students from diverse populations represented in California public schools and cooperation with at least one carefully selected teacher certificated in the discipline of study.

6.4 Prospective teachers will have opportunities to reflect on and analyze their early field experiences in relation to course content. These opportunities may include field experience journals, portfolios, and discussions in the subject matter courses, among others.

6.5 Each prospective teacher is primarily responsible for documenting early field experiences. Documentation is reviewed as part of the program requirements.

Standard 7: Assessment of Subject Matter Competence

The program uses formative and summative multiple measures to assess the subject matter competence of each candidate. The scope and content of each candidate's assessment is consistent with the content of the subject matter requirements of the program and with institutional standards for program completion.

Required Elements:

7.1 Assessment within the program includes multiple measures such as student performances, presentations, research projects, portfolios, field experience journals, observations, and interviews as well as oral and written examinations based on criteria established by the institution.

7.2 The scope and content of each assessment is congruent with the specifications for the subject matter knowledge and competence as indicated in the content domains of the Commission-adopted subject matter requirement.

7.3 End-of-program summative assessment of subject matter competence includes a defined process that incorporates multiple measures for evaluation of performance.

7.4 Assessment scope, process, and criteria are clearly delineated and made available to students when they begin the program.

7.5 Program faculty regularly evaluate the quality, fairness, and effectiveness of the assessment process, including its consistency with program requirements.

7.6 The institution that sponsors the program determines, establishes and implements a standard of minimum scholarship (such as overall GPA, minimum course grade or other assessments) of program completion for prospective single subject teachers.

Standard 8: Advisement and Support

The subject matter program includes a system for identifying, advising and retaining prospective Single Subject teachers. This system will comprehensively address the distinct needs and interests of a range of prospective teachers, including resident prospective students, early deciders entering blended programs, groups underrepresented among current teachers, prospective teachers who transfer to the institution, and prospective teachers in career transition.

Required Elements:

8.1 The institution will develop and implement processes for identifying prospective Single Subject teachers and advising them about all program requirements and career options.

8.2 Advisement services will provide prospective teachers with information about their academic progress, including transfer agreements and alternative paths to a teaching credential, and describe the specific qualifications needed for each type of credential, including the teaching assignments it authorizes.

8.3 The subject matter program facilitates the transfer of prospective teachers between post-secondary institutions, including community colleges, through effective outreach and advising and the articulation of courses and requirements. The program sponsor works cooperatively with community colleges to ensure that subject matter coursework at feeder campuses is aligned with the relevant portions of the *State-adopted Academic Content Standards for K-12 Students in California Public Schools*.

8.4 The institution establishes clear and reasonable criteria and allocates sufficient time and personnel resources to enable qualified personnel to evaluate prospective teachers' previous coursework and/or fieldwork for meeting subject matter requirements.

Standard 9: Program Review and Evaluation

The institution implements a comprehensive, ongoing system for periodic review of and improvement to the subject matter program. The ongoing system of review and improvement involves university faculty, community college faculty, student candidates and appropriate public schools personnel involved in beginning teacher preparation and induction. Periodic reviews shall be conducted at intervals not exceeding 5 years.

Required Elements:

9.1 Each periodic review includes an examination of program goals, design, curriculum, requirements, student success, technology uses, advising services, assessment procedures and program outcomes for prospective teachers.

9.2 Each program review examines the quality and effectiveness of collaborative partnerships with secondary schools and community colleges.

9.3 The program uses appropriate methods to collect data to assess the subject matter program's strengths, weaknesses and areas that need improvement. Participants in the review include faculty members, current students, recent graduates, education faculty, employers, and appropriate community college and public school personnel.

9.4 Program improvements are based on the results of periodic reviews, the inclusion and implications of new knowledge about the subject(s) of study, the identified needs of program students and school districts in the region, and curriculum policies of the State of California.

Standard 10: Coordination

One or more faculty responsible for program planning, implementation and review coordinate the Single Subject Matter Preparation Program. The program sponsor allocates resources to support effective coordination and implementation of all aspects of the program. The coordinator(s) fosters and facilitates ongoing collaboration among academic program faculty, local school personnel, local community colleges and the professional education faculty.

Required Elements:

10.1 A program coordinator will be designated from among the academic program faculty.

10.2 The program coordinator provides opportunities for collaboration by faculty, students, and appropriate public school personnel in the design and development of and revisions to the program, and communicates program goals to the campus community, other academic partners, school districts and the public.

10.3 The institution allocates sufficient time and resources for faculty coordination and staff support for development, implementation and revision of all aspects of the program.

10.4 The program provides opportunities for collaboration on curriculum development among program faculty.

10.5 University and program faculty cooperate with community colleges to coordinate courses and articulate course requirements for prospective teachers to facilitate transfer to a baccalaureate degree-granting institution.

Physical Education Standards

Standard 11: Growth, Motor Development, and Motor Learning

The subject matter program provides students with opportunities to develop an understanding of human growth and development processes, as well as how these processes interact with and influence motor learning, in order to teach movement knowledge and skills. The program includes foundational knowledge of physical growth, motor development, and motor learning to ensure that candidates are prepared to provide students, including students with disabilities, with an appropriate, safe and effective physical education program.

Required Elements:

11.1 Coursework provides prospective teachers with knowledge of individual motor and physical fitness variables such as agility, balance, flexibility, coordination, strength, and speed.

11.2 Coursework prepares prospective teachers to analyze physical changes and their impact on mechanical and physiological aspects of motor performance.

11.3 Coursework provides prospective teachers with knowledge of perceptual-motor development such as visual, auditory, tactile, and kinesthetic discrimination and how they relate to skill acquisition and performance.

11.4 Coursework requires prospective teachers to develop an understanding of physical changes that occur with growth, development and age, while analyzing their impact on mechanical and physiological aspects of motor performance.

11.5 Coursework relates classical and current theories and models of motor learning to fundamental concepts underlying skill acquisition such as transfer, feedback, retention, practice, readiness, and observational learning

11.6 Coursework provides prospective teachers with knowledge of individual motor and physical fitness variables such as agility, balance, flexibility, coordination, strength and speed.

11.7 Coursework requires prospective teachers to develop knowledge of ecological task analysis as it relates to motor development, enabling students to select or design motor tasks that are appropriate to the process of learning movement skills.

11.8 Coursework prepares prospective teachers to analyze conditions that affect growth, motor development and motor learning such as disease, disabilities and social, emotional and environmental factors.

11.9 Coursework requires prospective teachers to develop an understanding of developmental differences in motor learning and factors that affect motor skill acquisition for individuals with disabilities.

Standard 12: The Science of Human Movement

The program requires preparation in the science of human movement, including the study of anatomy, physiology, biomechanics, exercise physiology and health-related fitness. Prospective teachers must be able to analyze motion according to scientific principles and apply that knowledge with consideration for individual differences including disabilities. Coursework requires prospective teachers to analyze motion and apply knowledge to recognize safe, efficient and effective movement. The program prepares prospective teachers to recognize changes in body systems resulting from practice, development and response to exercise.

Required Elements:

12.1 The coursework prepares prospective teachers to demonstrate knowledge of the skeletal system, the general organization of the nervous system, the actions of muscles and major muscle groups, and the interaction of these systems with one another and with the external environment in producing motion.

12.2 The program includes the study and application of basic kinematic and kinetic principles of motion, including but not limited to summation of forces of equilibrium, vectors and force-velocity relationships.

12.3 The coursework includes knowledge of biomechanical principles (e.g., Newton's laws of motion, center of gravity) and develops prospective teachers' abilities to apply principles to a broad range of movement activities to analyze movement patterns, to recognize individual differences, and to analyze body mechanics for safe and efficient movement/motion.

12.4 The program includes knowledge of acute and chronic effects of exercise on body systems (e.g., pulmonary, cardiorespiratory, muscular, skeletal, neural, endocrine) and on energy systems utilized during exercise.

12.5 The coursework prepares prospective teachers to demonstrate an understanding of components of wellness, such as nutrition, stress management, cardiorespiratory risk reduction and physical fitness (i.e.,cardiorespiratory endurance, flexibility, muscular strength and endurance, and body composition).

12.6 The coursework prepares prospective teachers to analyze the effects of factors such as gender, age, disability, environment, currently identified health/risk factors (e.g., diabetes, asthma, obesity), and substance abuse on physical fitness and physical performance.

12.7 The program prepares prospective teachers to demonstrate knowledge of physical fitness testing, exercise prescription, and fitness programs for all individuals, including those with disabilities, as well as the components of health-related fitness and technologies for fitness testing and training.

12.8 The program prepares prospective physical education teachers to demonstrate an understanding of safety-related topics (e.g., the prevention of injuries. cardiopulmonary resuscitation, first aid).

12.9 The coursework prepares prospective teachers to apply knowledge of physiological principles (e.g., overload, specificity, FIT, reversibility) to the components of physical fitness.

12.10 The program provides prospective teachers with opportunities to explore the technologies appropriate for movement analysis and fitness training.

Standard 13: The Sociology and Psychology of Human Movement

The subject matter program provides prospective candidates with opportunities to develop an understanding of the sociology and psychology of human movement. The program provides a context for analyzing a wide range of experiences that can be used to promote personal and social development and skills in physical education. The program includes psychological and sociological analysis of movement activities, which help to ensure candidates are prepared to teach positive responsible and social behaviors that encourage lifelong physical activity, regardless of ability.

Required Elements:

13.1 Coursework requires prospective teachers to examine the relationship of movement to the development of individual identity, including the development of self-awareness, self-concept, self-discipline, self-expression and body image.

13.2 Coursework requires prospective teachers to explore contemporary theories (e.g., attribution, social learning, competence, learned helplessness, self-efficacy) as they relate to motivation in physical activities.

13.3 Coursework prepares prospective teachers to analyze the relationship of movement to social interaction, the development of group member identity, the development of a sense of productive participation with others, and the promotion of positive life skills (e.g., loyalty, compassion, fairness, understanding and appreciation of similarities, differences and abilities) through physical education activities.

13.4 Coursework provides prospective teachers with strategies and activities for promoting appropriate skills and behaviors for cooperation, competition, problem solving, trust building and risk taking.

13.5 Coursework requires prospective teachers to develop knowledge of the role of movement activities in society and the relationship of movement activities to social norms, ethics, values and institutions.

13.6 Coursework prepares prospective teachers to analyze factors that influence an individual's activity choice (e.g., gender, age, ethnicity, culture and disability).

Standard 14: Movement Concepts and Forms

The subject matter preparation program requires coursework that develops knowledge, skills, and the ability to integrate and apply movement concepts in physical activities. These include but are not limited to aquatics; dance; fitness activities; fundamental and creative movement skills; individual , dual, and team sports; nontraditional activities and games; outdoor education activities; and gymnastics. To develop a balanced program that will address a variety of ability levels and create challenging, appropriate tasks in a variety of movement forms, prospective teachers must have a thorough understanding of movement and fitness activities as well as an ability to integrate and apply movement concepts to a broad range of physical education activities and environments.

Required Elements:

14.1 The program requires prospective teachers to develop knowledge of and demonstrate fundamental movement skills such as basic locomotor and non-locomotor skills, movement patterns, manipulative skills and basic rhythmic movement, as well as knowledge of elements and qualities of movement (e.g., space, time, force, flow, level).

14.2 The program requires prospective teachers to develop knowledge of and demonstrate creative movement, such as exploration, improvisation and problem solving.

14.3 The program requires prospective teachers to develop knowledge of skills used in rhythmic activities, creative dance and structured dance forms (e.g., modern, ballet, jazz, tap, social, fold, country, ethnic, classical); an understanding of the use of dance to express perceptions, feelings, images and thoughts; and an understanding of dance concepts, forms and basic vocabulary.

14.4 The program requires prospective teachers to develop knowledge of and demonstrate gymnastic forms and movement (e.g., rhythmic gymnastics, educational gymnastics, stunts, tumbling, apparatus work and floor exercise).

14.5 The program requires prospective teachers to develop knowledge of and demonstrate aquatic skills and elements of water safety (e.g., swimming strokes, diving, and water fitness activities and games).

14.6 The program requires prospective teachers to develop knowledge of and demonstrate techniques, skills, strategies, critical elements, scientific principles, and equipment for individual, dual, and team sports, games, and activities. In addition the program requires prospective teachers to

develop the knowledge of developmental progressions and the application of motor learning principles (e.g., transfer, game-like conditions) in instruction for sport skills and games. The prospective teacher develops an understanding of critical-thinking, decision-making, problem-solving, collaborating, communication, leadership, conflict resolution and teamwork skills.

14.7 The program requires prospective teachers to develop knowledge of outdoor education activities (e.g., orienteering, outdoor survival skills, ropes, hiking and backpacking) and an understanding of long-term psychological, physiological and lifestyle benefits of participation in outdoor education activities.

14.8 The program requires prospective teachers to develop knowledge of how to promote critical thinking, decision making, problem-solving, collaboration, cooperation, leadership and communication through participation in non-traditional, global, and cooperative games and activities (e.g., disk activities, lacrosse, team juggling).

14.9 The program requires prospective teachers to develop knowledge of one or more basic combative activities (e.g., fencing, wrestling, self-defense) and related safety issues.

14.10 The program requires prospective teachers to develop an understanding of and demonstrate fitness activities such as aerobic conditioning, resistance and weight training, and stretching that increase cardiovascular efficiency, muscular strength and endurance, and flexibility.

Standard 15: Professional Foundations

The subject matter program includes the study of the philosophical, historical, legal, and ethical foundations of physical education and provides knowledge of the past/present philosophies of physical education and issues that affect and impact contemporary programs.

Required Elements:

15.1 Coursework requires prospective teachers to explore past and present philosophies of physical education and their impact on the goals, scope and components of physical education programs.

15.2 Coursework requires prospective teachers to develop an understanding of the organization, purpose and goals of contemporary physical education programs.

15.3 Coursework includes the study of the historical development of physical education.

15.4 Coursework provides opportunities for prospective teachers to analyze current research, trends and issues that affect physical education (e.g., inclusion, lifelong fitness, the sharp increase in obesity-related diseases among U.S. youth) and their impact on physical education programs and goals.

15.5 Coursework includes review of legal and ethical issues in physical education, such as those related to supervision, liability, confidentiality, equity, disability and diversity.

15.6 The subject matter program includes examination of the interrelationships of the subdisciplines of kinesiology.

15.7 Coursework introduces prospective teachers to organizations and resources that support physical education (e.g., California Association for Health, Physical Education, Recreation and Dance; American Alliance for Health, Physical Education, Recreation and Dance; American College of Sports Medicine; National Council for the Exceptional Individual) and professional responsibilities.

15.8 Coursework includes study of current state and national standards for physical education.

Standard 16: Assessment and Evaluation Principles

The program requires prospective teachers to develop knowledge of assessment principles and procedures to evaluate the effectiveness of physical education strategies and activities in promoting student achievement of the goals presented in the *California Physical Education Framework* or most current state-adopted document. Prospective teachers must be able to select, adapt, and develop appropriate assessment instruments and strategies based on accepted research principles related to physical, motor, and fitness attributes and needs of individuals and groups. The program provides knowledge of assessment techniques that enhance prospective teachers' ability to determine whether individuals, including those with diverse backgrounds, varying abilities and special needs, have progressed and achieved specified goals in physical education.

Required Elements:

16.1 The program provides knowledge of evaluation methods and practical applications used for the various domains of learning in physical education (physical, psychomotor, cognitive, social, affective).

16.2 The program provides knowledge of basic strategies of test construction, evaluation and administration for traditional, holistic and authentic assessments such as developing and using criteria to assess attainment of goals and objectives.

16.3 The program provides knowledge of test characteristics such as validity, reliability and objectivity.

16.4 The program provides knowledge of assessment strategies and instruments, including technology appropriate for individuals with diverse backgrounds, special needs and disabilities.

16.5 The program requires prospective teachers to develop an understanding of types of evaluation such as norm-referenced, criterion-referenced, and content-referenced authentic assessment and formative and summative evaluation strategies.

16.6 The program requires prospective teachers to develop knowledge of basic statistical applications, including central tendency and variability, standard scores, norms, and correlations.

16.7 The program requires prospective teachers to develop skills for interpreting assessment data and for communicating test results, performance profiles, and assessment data to various audiences (e.g., students, parents, school board members).

Standard 17: Integration of Concepts

The subject matter program includes integrative study of themes and concepts in physical education and the interrelationships between physical education and other subject areas in order to create effective learning environments and experiences.

Required Elements:

17.1 Coursework prepares prospective teachers to interpret and apply knowledge of the subdisciplines of kinesiology to facilitate student (K-12) skill acquisition and performance through inclusion and active engagement.

17.2 Coursework prepares prospective teachers to use developmental information to appropriately select, adapt and modify sports, games and physical activities based on goals, skill levels, individual needs and disabilities.

17.3 Coursework requires prospective teachers to demonstrate knowledge of appropriate developmental progressions within and between individual movement skills.

17.4 Coursework prepares prospective teachers to use concepts and principles of learning to analyze observed individual differences.

17.5 Coursework requires prospective teachers to demonstrate knowledge of connections between physical education and other subject areas such as the life and physical sciences, social science, health, mathematics, language arts, and the visual and performing arts.

17.6 Coursework provides prospective teachers with strategies for encouraging lifelong adherence to physical activities.

Concentration in Dance

Standard 18: Artistic Perception

The dance concentration program includes processing, analyzing and responding to sensory information through the knowledge and skills unique to dance. The program prepares prospective teachers to demonstrate movement skills, process sensory information and describe movement using vocabulary of dance. The program provides a study of motor skills and development, technical expertise, dance movements, comprehension and analysis of dance elements, and study of dance vocabulary.

Required Elements:

18.1 The program prepares prospective teachers to develop physical coordination and control when performing body articulation, complex loco/motor patterns, and axial movement phrases from a variety of genres, demonstrating agility, balance and strength.

18.2 The program provides a study of multiple dance genres and integration of an advanced level of technical skill in at least one genre.

18.3 The program prepares prospective teachers to memorize and perform complex works of dance at a high level of refinement.

18.4 The program prepares prospective teachers to apply a wide range of kinesthetic communication and to demonstrate clarity of intent and stylistic nuance.

18.5 The program prepares prospective teachers to utilize dance vocabulary to describe movement and dance elements.

Standard 19: Creative Expression

The dance concentration program includes the study of the application of choreographic principles, processes, and skills needed to create and communicate meaning through the improvisation, composition and performance of dance. The program provides prospective teachers a study of the creation of dance movement, the application of choreographic principles and processes used to create dance, communication of meaning in performance of dance, and the development of partner and group skills.

Required Elements:

19.1 The program provides the study of diverse dance works that demonstrate originality, unity, clarity of intent and a dynamic range of movement.

19.2 The program includes the study of the use of dance structures, musical forms, theatrical elements, and technology to create original works.

19.3 The program includes the study of the notation of dances using a variety of systems (e.g., labanotion, motif writing, personal systems).

19.4 The program provides the study of music for dances and choreography.

19.5 The program provides an opportunity for prospective teachers to perform a diverse range of works by various dance artists, maintaining the integrity of the work while applying personal artistic expression.

19.6 The program provides prospective teachers with the opportunity for developing complex choreography for diverse groupings in varied settings, including the modification for movement for different abilities.

Standard 20: Historical and Cultural Context

The dance concentration program includes coursework that provides candidates with an understanding of and appreciation for the history and cultural dimensions of dance. The program prepares candidates to recognize dance similarities and differences in cultures throughout the world.

Required Elements:

20.1 The program provides the study of the development of dance by identifying, analyzing and performing folk/traditional, social and theatrical dances with technical accuracy and appropriate stylistic nuances.

20.2 The program provides the study of the history and function of dance by comparing and contrasting universal themes and sociopolitical issues in a variety of dances from different cultural contexts and time periods.

20.3 The program provides the study of the diversity of dance by analyzing and explaining how dancers and choreographers reflect roles, work and values in selected cultures, countries and historical periods.

20.4 The program provides the study of the role dancers and choreographers play in the interpretation of dances in various historical and cultural settings.

Standard 21: Aesthetic Valuing

The dance concentration includes coursework that require prospective teachers to respond, analyze and evaluate works of dance. Prospective teachers assess and derive meaning from viewing works of dance, performing dances, and critiquing original works based on the elements of dance and aesthetic qualities.

Required Elements:

21.1 The program provides the study and critique of archival dance works.

21.2 The program provides the study of selected criteria to compare, contrast and assess various dance forms (e.g., jazz dance, modern dance, ballet, and liturgical).

21.3 The program requires prospective teachers to analyze evolving personal preferences about dance styles and choreographic forms in order to identify change and development of personal choices.

21.4 The program provides the study of research and assessment of how dance works change due to the impact of historic and cultural influences.

21.5 The program requires prospective teachers to evaluate how aesthetic principles apply to choreography designed for technological media (e.g., film, video, TV, computer imaging).

Standard 22: Integration: Connections, Relationships, Applications

The program prepares prospective teachers to apply what they learn in dance to learning across disciplines in order to develop competencies and creative skills in problem-solving, communication and time management. The program requires prospective teachers to learn about careers related to dance.

Required Elements:

22.1 The program prepares prospective teachers to demonstrate effective knowledge and skills in using technology when creating, recording and producing dance.

22.2 The program prepares prospective teachers to analyze the study and practice of dance techniques based on physical principles from scientific disciplines.

22.3 The program prepares prospective teachers to synthesize information from a variety of health and wellness-related resources that apply to dance.

22.4 The dance concentration prepares prospective teachers to determine the appropriate training, experience and education needed to pursue a variety of dance and dance-related careers.

Physical Education Subject Matter Requirements

Part I: Content Domains for Subject Matter Understanding and Skill in Physical Education

Domain 1. Professional Foundations

Candidates demonstrate an understanding of the philosophical, historical, and legal/ethical foundations of physical education. To plan and implement programs that are aligned with the approved Physical Education Framework or other approved state documents and the Challenge Standards for Student Success: Physical Education (1998), candidates must have a broad and deep understanding of issues that affect the field, of the professional responsibilities of physical educators, and of the past and present philosophies of physical education and their impact on contemporary programs.

1.1 Philosophies of Physical Education

a. Demonstrate knowledge of past and present philosophies of physical education and their impact on the goals, scope, and components of physical education programs.
b. Demonstrate an understanding of the organization, purposes, and goals of contemporary physical education programs.

1.2 Historical Development

Demonstrate knowledge of the historical development of physical education, including contributions of noteworthy physical educators of various backgrounds, races, ethnicities, genders, and national origins.

1.3 Current Research, Trends, and Issues

Analyze current research, trends, and issues that affect physical education (e.g., inclusion, lifelong fitness, the sharp increase in obesity-related diseases among U.S. youth) and their impact on physical education programs and goals.

1.4 Legal and Ethical Issues

Demonstrate an understanding of legal and ethical issues in physical education, such as those related to supervision, liability, confidentiality, equity, disability, and diversity.

1.5 Interrelationships of the Subdisciplines of Kinesiology

Demonstrate an understanding of the interrelationships of the subdisciplines of kinesiology.

1.6 Professional Responsibilities, Organizations, and Resources

a. Demonstrate knowledge of professional responsibilities, organizations, and resources that support physical education (e.g., AAHPERD, American College of Sports Medicine, National Council for the Exceptional Individual).
b. Demonstrate knowledge of current state and national standards for physical education.

1.7 Relationship Between Human Movement Activities and Values

a. Demonstrate an understanding of human movement activities as instruments for maintaining traditional values and/or for examining and changing traditional values.
b. Analyze the role of physical education in promoting equity for diverse groups.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1, 2, 3, and 7. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 4, 7, 8, and 9.)

Domain 2. Growth, Motor Development, and Motor Learning

Candidates must demonstrate an understanding of human growth and development processes, as well as how these processes interact with and influence motor learning, in order to teach the movement knowledge and skills contained in the Challenge Standards for Student Success: Physical Education (1998). Foundational knowledge of physical growth, motor development, and motor learning helps ensure that candidates are prepared to provide students, including students with disabilities, with an appropriate, safe, and effective physical education program.

2.1 Individual Differences

a. Demonstrate knowledge of individual motor and physical fitness variables such as agility, balance, flexibility, coordination, strength, and speed.
b. Analyze individual physical changes and their impact on mechanical and physiological aspects of motor performance.

2.2 Perceptual-Motor Development

Know components of perceptual-motor development such as visual, auditory, tactile, and kinesthetic discrimination and how they relate to skill acquisition and performance.

2.3 Physical and Developmental Changes

Demonstrate an understanding of physical changes that occur with growth, development, and age, and analyze their impact on mechanical and physiological aspects of motor performance.

2.4 Motor Learning

Relate classical and current theories and models of motor learning to fundamental concepts underlying skill acquisition such as transfer, feedback, retention, practice, readiness, and observational learning.

2.5 Motor Task Analysis

Apply knowledge of motor task analysis as it relates to motor development, enabling students to select or design motor tasks that are appropriate to the process of learning movement skills.

2.6 Conditions Affecting Growth, Motor Development, and Motor Learning

Analyze conditions that affect growth, motor development, and motor learning such as diseases, disabilities, and social, emotional, and environmental factors.

2.7 Developmental Differences Affecting Motor Skills Acquisition

Demonstrate an understanding of developmental differences in motor learning and factors that affect motor skills acquisition for individuals with disabilities.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1 and 2. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standard 2.)

Domain 3. The Science of Human Movement

Candidates demonstrate an understanding of the scientific bases of human movement. To guide students in meeting the goals identified in the Challenge Standards for Student Success: Physical Education (1998), candidates must be able to analyze motion according to scientific principles and apply that knowledge with consideration for individual differences, including disabilities. A broad and deep understanding of the sciences involved in human movement, including anatomy, physiology, kinesiology/biomechanics, exercise physiology, and health-related fitness, enables candidates to understand and explain motion; recognize changes in body systems resulting from practice, development, and response to exercise; and provide instruction in safe and efficient body mechanics.

3.1 Body Systems

Demonstrate knowledge of the skeletal system, the general organization of the nervous system, the actions of muscles and major muscle groups, and the interaction of these systems with one another and with the external environment in producing motion.

3.2 Basic Kinematic and Kinetic Principles of Motion

Apply knowledge of basic kinematic and kinetic principles of motion including, but not limited to, summation of forces of equilibrium, vectors, and force-velocity relationships.

3.3 Biomechanical Principles

a. Apply knowledge of biomechanical principles (e.g., Newton's laws of motion, center of gravity) to a broad range of movement activities.
b. Apply knowledge of biomechanical principles in relation to individual differences and to body mechanics for safe and efficient movement/motion.

3.4 Movement Analysis

Apply knowledge of movement analysis to movement patterns, including technologies for movement analysis.

3.5 Effects of Exercise

Demonstrate knowledge of acute and chronic effects of exercise on body systems
(e.g., pulmonary, cardiorespiratory, muscular, skeletal, neural, endocrine) and on energy systems utilized during exercise.

3.6 Components of Wellness

a. Demonstrate an understanding of components of wellness, such as nutrition, stress management, cardiorespiratory risk reduction, and physical fitness (i.e., cardiorespiratory endurance, flexibility, muscular strength and endurance, and body composition).
b. Analyze the effects of factors such as gender, age, disability, environment, and substance abuse on physical fitness.

3.7 Physical Fitness Testing and Prescription

Demonstrate knowledge of physical fitness testing, exercise prescription, and fitness programs for all individuals, including those with disabilities, as well as the components of health-related fitness and technologies for fitness testing and training.

3.8 Factors Affecting Physical Performance

Analyze the effects of factors such as gender, age, disability, environment, and substance abuse on physical performance.

3.9 Safety, Injury Prevention, and First Aid

Demonstrate an understanding of safety-related topics such as the prevention and care of injuries, cardiopulmonary resuscitation, and first aid.

3.10 Physiological Principles of Fitness

Apply knowledge of physiological principles (e.g., overload, specificity, FIT, reversibility) to the components of physical fitness.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1, 2, 3, and 4. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 3, 5, and 10.)

Domain 4. The Sociology and Psychology of Human Movement

Candidates demonstrate an understanding of the sociology and psychology of human movement. Physical activity provides a context for a broad range of experiences that can be used to promote the personal and social developmental concepts and skills contained in the Challenge Standards for Student Success: Physical Education (1998). A broad and deep understanding of the sociological and psychological aspects of movement activities helps ensure that candidates are prepared to promote students' motivation for physical activity, regardless of students' abilities, and their development of positive, responsible personal and social behaviors that encourage lifelong physical activity.

4.1 Personal Development

Analyze the relationship of movement to the development of individual identity, including the development of self-awareness, self-concept, self-discipline, self-expression, and body image.

4.2 Theories Related to Motivation

Demonstrate an understanding of contemporary theories such as attribution, social learning, competence, learned helplessness, self-efficacy, and other social/psychological theories as they relate to motivation in physical activities.

4.3 Social Development

a. Analyze the relationship of movement to social interaction and the development of group member identity through physical education activities.
b. Identify strategies and activities for promoting appropriate skills and behaviors for cooperation, competition, problem solving, trust building, and risk taking.

4.4 Role of Movement Activities in Society

a. Demonstrate knowledge of the role of movement activities in society and the relationship of movement activities to social norms, ethics, values, and institutions.
b. Demonstrate knowledge of the role of movement activities in the development of social interaction skills, a sense of group identity, and a sense of productive participation with others.
c. Demonstrate knowledge of the role of movement activities in promoting positive social behaviors and traits (e.g., loyalty; compassion; fairness; understanding and appreciation of similarities, differences, and abilities).

4.5 Factors Influencing Activity Choices

Analyze factors that influence an individual's activity choices (e.g., gender, age, ethnicity, culture, disability).

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 4, 5, and 6. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 4 and 8.)

Domain 5. Movement Concepts and Forms

Candidates demonstrate an understanding of the movement concepts and forms contained in the Challenge Standards for Student Success: Physical Education (1998). These include but are not limited to aquatics; dance; fitness activities; fundamental and creative movement skills; individual, dual, and team sports; nontraditional activities and games; outdoor education activities; and gymnastics. To develop a balanced program that will address a variety of ability levels and create challenging, appropriate tasks in a variety of movement forms, candidates must have a broad and deep understanding of movement and fitness activities as well as an ability to integrate and apply movement concepts to a broad range of physical education activities and environments.

5.1 Fundamental and Creative Movement Skills

a. Demonstrate knowledge of fundamental movement skills such as basic locomotor and non-locomotor skills, movement patterns, manipulative skills, and basic rhythmic movement, as well as knowledge of elements and qualities of movement (e.g., space, time, force, flow, level).
b. Demonstrate knowledge of creative movement such as exploration, improvisation, and problem solving.

5.2 Dance Concepts and Forms

a. Demonstrate knowledge of skills used in rhythmic activities, creative dance, and structured dance forms (e.g., modern, ballet, jazz, tap, social, folk, country, ethnic, classical).
b. Demonstrate an understanding of the use of dance to express perceptions, feelings, images, and thoughts.
c. Demonstrate an understanding of dance concepts, forms, and basic vocabulary.

5.3 Gymnastic Movements

a. Demonstrate knowledge of gymnastic forms such as rhythmic gymnastics and educational gymnastics.
b. Demonstrate knowledge of gymnastic movements such as stunts, tumbling, apparatus work, and floor exercise.

5.4 Aquatic Skills

Demonstrate knowledge of aquatic skills such as water safety, swimming strokes, diving, and water fitness activities and games.

5.5 Individual, Dual, and Team Sports and Games

a. Demonstrate knowledge of techniques, skills, critical elements, scientific principles, and equipment for individual, dual, and team sports and games.
b. Apply knowledge of developmental progressions for sports activities.
c. Demonstrate an understanding of principles of game strategies.
d. Demonstrate knowledge of safety, etiquette, fair play, and fair competition.
e. Apply knowledge of how to promote critical-thinking, decision-making, problem-solving, collaboration, communication, leadership, conflict-resolution, and teamwork skills through participation in sports and games.
f. Demonstrate knowledge of the application of motor learning principles (e.g., transfer, game-like conditions) in instruction for sports and games.

5.6 Outdoor Education

a. Demonstrate knowledge of techniques, skills, and safety issues for outdoor education activities.
b. Identify long-term psychological, physiological, and lifestyle benefits of participation in outdoor education activities.

5.7 Nontraditional and Cooperative Activities

a. Identify examples of nontraditional, global, and cooperative games and activities
(e.g., Pickle ball, bocce ball, team juggling).
b. Apply knowledge of how to promote critical thinking, decision making, problem solving, collaboration, cooperation, leadership, and communication through participation in non-traditional and cooperative activities.

5.8 Combative Activities

Demonstrate knowledge of one or more basic combative activities (e.g., fencing, wrestling, self-defense) and related safety issues.

5.9 Fitness Activities

Demonstrate an understanding of fitness activities such as aerobic conditioning, resistance and weight training, and stretching that increase cardiovascular efficiency, muscular strength and endurance, and flexibility.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1, 2, 3, and 4. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standard 5.)

Domain 6. Assessment and Evaluation Principles

Candidates must demonstrate an understanding of assessment principles and procedures in order to be able to evaluate the effectiveness of physical education strategies and activities in promoting student achievement of the goals presented in the Challenge Standards for Student Success: Physical Education (1998). A rigorous knowledge of assessment helps ensure that candidates can determine whether individuals, including those with diverse backgrounds, varying abilities, and special needs, have progressed and achieved specified goals in physical education. Candidates must be able to select, adapt, and develop appropriate assessment instruments and strategies based on sound research principles related to physical, motor, and fitness attributes and needs of individuals and classes.

6.1 Evaluation Methods in Physical Education

Demonstrate knowledge of evaluation methods used for the various domains of learning in physical education (e.g., physical, psychomotor, cognitive, social, affective).

6.2 Techniques of Test Construction, Evaluation, and Administration

Demonstrate knowledge of basic strategies of test construction, evaluation, and administration for traditional, holistic, and authentic assessments such as developing and using criteria to assess attainment of goals and objectives.

6.3 Test Characteristics

Apply knowledge of test characteristics such as validity, reliability, and objectivity.

6.4 Assessment Techniques and Tools

Apply knowledge of assessment strategies and instruments, including technology, that are appropriate for individuals with diverse backgrounds, special needs, and disabilities.

6.5 Types of Evaluation

a. Demonstrate an understanding of types of evaluation such as norm-referenced, criterion-referenced, content-referenced, and authentic assessment.
b. Demonstrate knowledge of formative and summative evaluation strategies.

6.6 Basic Statistical Applications

Demonstrate knowledge of basic statistical applications, including central tendency and variability, standard scores, norms, and correlations.

6.7 Interpretation and Communication of Assessment Data

Apply skills for interpreting assessment data and for communicating test results, performance profiles, and assessment data to various audiences (e.g., students, parents, school board members).

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 1, 2, and 5. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 6, 10, and 11.)

Domain 7. Integration of Concepts

Candidates must demonstrate an understanding of the integration of themes and concepts in physical education and the interrelationships between physical education and other subject areas in order to create effective learning environments and experiences that provide students with opportunities to achieve the goals contained in the Challenge Standards for Student Success: Physical Education (1998).

7.1 Interpretation and Application of the Subdisciplines of Kinesiology

Interpret and apply knowledge of the subdisciplines of kinesiology to facilitate student skill acquisition and performance.

7.2 Selecting, Adapting, and Modifying Activities

Use developmental information to appropriately select, adapt, and modify sports and games based on goals, skill levels, individual needs, and disabilities.

7.3 Developmental Progressions

Demonstrate knowledge of appropriate developmental progressions within and between individual movement skills.

7.4 Learning Concepts and Principles

Use concepts and principles of learning to analyze observed individual differences.

7.5 Connections Between Physical Education and Other Disciplines

Demonstrate knowledge of connections between physical education and other subject areas such as life and physical sciences, social science, health, mathematics, language arts, and visual and performing arts.

(Challenge Standards for Student Success: Physical Education, Kindergarten Through High School (1998), Standards 2, 3, 4, 6, and 7. Physical Education Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs (1994), Standards 5, 7, 9, 10, and 11.)

Part II: Subject Matter Skills and Abilities Applicable to the Content Domains in Physical Education

Candidates apply knowledge of the theoretical and scientific bases of human movement to design, select, and modify physical activities that reflect students' developmental characteristics and individual differences. They draw upon knowledge of the subdisciplines of kinesiology to ensure that students are able to participate safely and effectively in physical education activities designed to develop and enhance their movement skills and movement knowledge.

Candidates understand significant factors and influences in developing, analyzing, and assessing basic motor skills. They know how to structure developmentally appropriate activities to promote maximum participation, inclusion, and active engagement in a wide range of movement forms, including traditional and nontraditional games, sports, dance, and fitness activities. They select and create cooperative and competitive activities that promote trust building, problem solving, collaboration, leadership, and strategic planning. They design fitness programs and recommend exercises and activities that are based on sound physiological and fitness training principles. Candidates understand the short-term and long-term benefits of a healthy, active lifestyle and know how to demonstrate and communicate these benefits to students.

Candidates apply knowledge of the sociological, psychological, philosophical, historical, and cultural dimensions of physical education to select and develop activities and approaches that promote students' development of positive personal and social behaviors, including social interaction and communication skills. They are aware of the role of movement activities in helping participants develop a sense of individual identity and group member identity. Candidates use knowledge of historical and cultural influences on games, sports, dance, and other physical activities to enhance student awareness and appreciation of cultural and artistic diversity, the role of movement in society, and the use of physical activity for enjoyment and self-expression. They recognize the importance of inclusion, fair play, and etiquette, as well as respect and consideration for self and others. Candidates understand that many factors influence an individual's activity choices and carefully evaluate the appropriateness of activities in terms of participants' age and developmental levels, motor proficiency, gender, cultural background, and physical strengths and limitations. Candidates apply knowledge of student development and learning to select activities and approaches that help students experience the benefits of individual challenges and successes, and they use principles of learning and motivation to spark students' interest in physical activity and their desire to engage in lifelong physical activity.

Candidates use their knowledge of assessment principles and procedures to collect, analyze, interpret, and summarize assessment data. They know physical fitness testing principles, technologies, and techniques and are prepared to administer the state-mandated physical fitness assessment. Candidates are able to interpret and communicate test results, performance profiles, and other types of assessment information in a meaningful and sensitive way.

Candidates understand connections among the subdisciplines of kinesiology, as well as connections between physical education and other subject areas and use this understanding to provide learning activities that promote student skill acquisition and performance. Candidates select, adapt, and modify activities based on program goals, individual differences, and individual needs so that all students have an opportunity to develop their understanding and application of movement skills and concepts and to use this knowledge in exploring other academic and life skills areas.